## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1 1.-185 (Canceled).
- 1 186. (Currently amended) Mesogens having the following formula:

$$X - (O)O - R^2 - O(O)C - R^3$$

3 wherein

2

- 4 X and Y independently are selected from the group consisting of amino groups,
- 5 polymerizable groups, and combinations thereof, provided that when X is
- 6 polymerizable group, Y is amino group;
- 7 R<sup>2</sup> is selected from the group consisting of t-butyl groups, isopropyl groups, and
- 8 secondary butyl groups; and
- 9 R<sup>1</sup> and R<sup>3</sup> are selected from the group consisting of hydrogen and a methyl group groups
- 10 less bulky than R<sup>3</sup>.
- 1 187. (Previously presented) The mesogens of claim 186 wherein said
- 2 polymerizable groups have polymerizable unsaturated carbon-carbon bond.
- 1 188. (Previously presented) The mesogens of claim 186 wherein said
- 2 polymerizable groups are selected from the group consisting of acryloyloxy alkoxy
- 3 groups and methacryloyloxy alkoxy groups having alkyl moiety with from 2 to 12 carbon
- 4 atoms.
- 1 189. (Previously presented) The mesogens of claim 188 wherein said alkyl
- 2 moiety consists essentially of from 2 to 12 carbon atoms and CH2 groups optionally are

3

group.

3 substituted by groups selected from the group consisting of oxygen, sulfur, and ester 4 groups; provided that two or more carbon atoms separate said oxygen from said ester 5 groups. 1 190. (Previously presented) The mesogens of claim 189 wherein said alkyl 2 moiety consists essentially of a total of from 2 to 9 carbon atoms. 1 (Previously presented) The mesogens of claim 189 wherein said alkyl 2 moiety consists essentially of a total of from 2 to 6 carbon atoms. 192.-193. (Canceled) 1 (Currently amended) The mesogens of claim 186 wherein one or more 2 member members selected from the group consisting of X and Y further consists 3 essentially of a spacer group. 1 (Currently amended) The mesogens of claim 187 wherein one or more 2 memberinembers selected from the group consisting of X and Y further consists 3 essentially of a spacer group. 1 (Currently amended) The mesogens of claim 186 wherein one or more 2 membermembers selected from the group consisting of X and Y is a cinnamoyloxy 3 group. 197. (Currently amended) The mesogens of claim 194 wherein one or more 2 membermembers selected from the group consisting of X and Y is a cinnamoyloxy 3 group. 1 198. (Currently amended) The mesogens of claim 195 wherein one or more 2

membernembers selected from the group consisting of X and Y is a cinnamoyloxy

1 199. (Currently amended) Mesogens having the following formula:

$$X - (O)O - (O)C - (O)$$

3 wherein

2

- 4 X is a polymerizable group selected from the group consisting of acryloyloxy alkoxy
- 5 groups and methacryloyloxy alkoxy groups having alkyl moiety with from 2 to 12
- 6 <u>carbon atoms</u>comprising polymerizable unsaturated carbon carbon bond;
- 7 Y comprises an amino group;
- 8 R<sup>2</sup> is selected from the group consisting of alkyl groups having from about 1 to 6 carbon
- 9 atoms and aryl groups; and
- 10 R<sup>1</sup> and R<sup>3</sup> are selected from the group consisting of hydrogen and a methyl group gro
- 11 less bulky than R<sup>2</sup>.
- 1 200. (Canceled).
- 1 201. (Previously presented) The mesogens of claim 200 wherein said alkyl
- 2 moiety consists essentially of from 2 to 12 carbon atoms and CH<sub>2</sub> groups optionally are
- 3 substituted by groups selected from the group consisting of oxygen, sulfur, and ester
- 4 groups; provided that two or more carbon atoms separate said oxygen from said ester
- 5 groups.
- 1 202. (Previously presented) The mesogens of claim 201 wherein said alkyl
- 2 moiety consists essentially of a total of from 2 to 9 carbon atoms.
- 1 203. (Previously presented) The mesogens of claim 201 wherein said alkyl
- 2 moiety consists essentially of a total of from 2 to 6 carbon atoms.
- 1 204.-205. (Canceled).

2

5

6

9

10

11

- 1 206. (Currently amended) The mesogens of claim 199 wherein one or more
  2 membermembers selected from the group consisting of X and Y further consists
- 3 essentially of a spacer group.
- 1 207. (Currently amended) The mesogens of claim 201 wherein one or more
- 2 membermembers selected from the group consisting of X and Y further consists
- 3 essentially of <u>a spacer group</u>.
- 1 208. (Currently amended) The mesogens of claim 204 wherein one or more
- 2 membermembers selected from the group consisting of X and Y comprises consists
- 3 <u>essentially of a cinnamoyloxy group.</u>
- 1 209. (Currently amended) Mesogens having the following formula:

$$X - \left( \begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \end{array} \right) - C(O)O - \left( \begin{array}{c} \\ \\ \\ \\ \\ \end{array} \right) - O(O)C - \left( \begin{array}{c} \\ \\ \\ \\ \\ \end{array} \right) - Y$$

3 wherein X and Y independently are selected from the group consisting of spacer groups,

polymerizable groups, and combinations thereof, one or more membermembers

selected from the group consisting of X and Y having the following structure:

wherein Z is selected from the group consisting of spacer groups, terminal

8 functionalities, polymerizable groups, and combinations thereof, said spacer

groups being selected from the group consisting of H-(CH<sub>2</sub>)<sub>n</sub>-O- groups,

Cl(CH<sub>2</sub>)<sub>n</sub>-O- groups, Br(CH<sub>2</sub>)<sub>n</sub>-O- groups, I(CH<sub>2</sub>)<sub>n</sub>-O-, wherein n is from about 2

to about 12 wherein the CH2 groups independently can be substituted by oxygen,

12 sulfur, or an ester group; provided that at least 2 carbon atoms separate said 13 oxygen or said ester group; R<sup>2</sup> is selected from the group consisting of alkyl groups having from about 1 to 6 carbon 14 15 atoms and aryl groups; and R<sup>1</sup> and R<sup>3</sup> are selected from the group consisting of hydrogen and a methyl groupgroups 16 17 less bulky than R<sup>2</sup>. 1 210. (Previously presented) The mesogens of claim 209 wherein X and Y 2 further consist essentially of functionalities independently selected from the group 3 consisting of hydroxyl groups, amino groups, and sulfhydryl groups. 1 (Previously presented) The mesogens of claim 210 wherein n is from 2 about 2 to 9. 1 212. (Previously presented) The mesogens of claim 210 wherein n is from 2 to 2 6. 1 (Previously presented) The mesogens of claim 209 wherein said 2 polymerizable groups have alkyl moiety having polymerizable unsaturated carbon-carbon 3 bond. (Previously presented) The mesogens of claim 210 wherein said 2 polymerizable groups have alkyl moiety having polymerizable unsaturated carbon-carbon 3 bond. 1 (Previously presented) The mesogens of claim 214 wherein said alkyl 2 moiety has from 2 to 9 carbon atoms. (Currently amended) The mesogens of claim 214 wherein said alkyl 2 moiety has from from 2 to 6 carbon atoms.

1 217. (Previously presented) The mesogens of claim 209 wherein R<sup>2</sup> is selected 2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary 3 butyl groups, and phenyl groups. 1 (Previously presented) The mesogens of claim 210 wherein R<sup>2</sup> is selected 2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary 3 butyl groups, and phenyl groups. 1 219. (Previously presented) The mesogens of claim 213 wherein R<sup>2</sup> is selected 2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary 3 butyl groups, and phenyl groups. 1 (Previously presented) The mesogens of claim 214 wherein R<sup>2</sup> is selected 2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary .3 butyl groups, and phenyl groups. 1 (Previously presented) The mesogens of claim 216 wherein R<sup>2</sup> is selected 2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary 3 butyl groups, and phenyl groups. 222.-223. (Canceled) (Previously presented) The mesogens of claim 220 wherein R and R<sup>3</sup> are 2 selected from the group consisting of hydrogen and methyl group. (Previously presented) The mesogens of claim 221 wherein R and R<sup>3</sup> are 2 selected from the group consisting of hydrogen and methyl group. (Currently amended) The mesogens of claim 209 wherein one or more 2 membermembers selected from the group consisting of X and Y is cinnamoyloxy group.

1 227. (Currently amended) The mesogens of claim 217 wherein one or more
2 memberinembers selected from the group consisting of X and Y is cinnamoyloxy group.
1 228. (Currently amended) The mesogens of claim 222 wherein one or more
2 memberinembers selected from the group consisting of X and Y is cinnamoyloxy group.